

MASTER OF SCIENCE IN MANAGEMENT AND INDUSTRIAL STRATEGY

MASTERS FINAL WORK DISSERTATION

TECHNOLOGICAL BORN GLOBALS: THE ROLE OF
INTERNATIONAL ENTREPRENEURIAL ORIENTATION IN
THEIR RAPID INTERNATIONALIZATION

FILIPA SOFIA MARQUES FIGUEIRA

OCTOBER - 2018

MASTER OF SCIENCE IN MANAGEMENT AND INDUSTRIAL STRATEGY

MASTERS FINAL WORK DISSERTATION

TECHNOLOGICAL BORN GLOBALS: THE ROLE OF
INTERNATIONAL ENTREPRENEURIAL ORIENTATION IN
THEIR RAPID INTERNATIONALIZATION

FILIPA SOFIA MARQUES FIGUEIRA

SUPERVISORS:

PROFESSOR FRANCISCO DE LEMOS
PROFESSOR MANUEL LARANJA

OCTOBER – 2018

ACKNOWLEDGMENTS

On an academic level I would like to thank to Professor Francisco Figueira de Lemos, that always showed availability to help me from day one, explaining me better what the International Business world was and, after that, as my thesis supervisor and mentor, guiding me in this dissertation and giving me advices for the next step of my professional life.

My second acknowledgment goes to Professor Manuel Laranja and all the teachers that taught me so much in these 2 years, as well as my colleagues, from whom I learned a lot.

Thirdly, I want to express my gratitude to all the interviewees of the companies studied in this dissertation, which always showed availability to help me and teach me about the way business works, as well as important life lessons.

On a personal level I want to thank to family and friends. Getting this far wouldn't be possible without their help. First, I would like to thank my parents for all that they do for me. Coming to Lisbon to pursue this master wouldn't have been possible without them. In my family we were raised with two main values: a good education and hard work. I also want to thank my brothers because they are always there to cheer me up and help me get further.

I want to thank all my friends from Porto for all the support and motivation that they gave me. They all listened to me and gave me support to continue. My last acknowledgements go to Daniel, Isabel Afonso, Marina, Mahdi, Ștefan, Ricardo, João and Wadie, for all the conversations we had.

“Do not pray for an easy life; pray for the strength to endure a difficult one.”

“Only those who risk going too far can possibly find out how far one can go.”

ABSTRACT

A lot has been written about the emergence and development of *born global* firms in the academic literature and scholars reached the conclusion that there is a strong relationship between entrepreneurial orientation and superior performance in *born global* firms. Nonetheless, it is still not clear how managers succeed to secure this relationship.

This dissertation emphasizes on the relationship between the international entrepreneurial orientation and rapid internationalization of three technological *born global* firms from the finance and technology, *call centre* and hotel industry. The main goal of this work is to understand how these *born global* firms achieved a successful internationalization and which factors contributed to this success.

A qualitative methodology was conducted, using semi-structured interviews and the empirical evidence displayed that a successful internationalization relies on the entrepreneur and his proactive engagement for seeking new markets, as well as the use of his personal and business networks, always focusing on employing a learning orientation.

The last section of this study presents a feasible path that managers and entrepreneurs can use to assure a sustainable development and successful internationalization for their firms.

Keywords: *Born Globals*, Rapid internationalization, International Entrepreneurship, International entrepreneurial orientation, Dynamic capabilities

RESUMO

O aparecimento e a evolução de um novo tipo de empresas, que nascem globais e têm uma rápida internacionalização tem sido bastante estudado. Os investigadores confirmaram que há uma forte relação entre uma orientação empreendedora e uma performance superior nas empresas *born global*. No entanto, ainda não é bem explícito de que forma é que os gestores asseguram esta relação.

Esta dissertação foca-se na relação entre a orientação empreendedora e a rápida internacionalização de três *born globals* portuguesas, dos sectores financeiro, *call centre* e hoteleiro. O principal objetivo deste trabalho é entender como é que estas empresas conseguiram ter sucesso na sua internacionalização, assim como quais os fatores que contribuíram para este sucesso.

Foi utilizada uma metodologia qualitativa, usando entrevistas semi-estruturadas. A evidência empírica sugere que uma internacionalização de sucesso está relacionada com o empreendedor e o seu comportamento pró-ativo na procura de mercados externos, usando as suas conexões pessoais e profissionais e mantendo ao mesmo tempo uma postura de aprendizagem.

Na última secção deste estudo é apresentada uma orientação que os gestores podem utilizar para garantir uma internacionalização de sucesso e o crescimento sustentável das suas empresas.

Palavras-chave: *Born Globals*, Internacionalização rápida, Empreendedorismo Internacional, Orientação empreendedora internacional, capacidades dinâmicas

INDEX

ACKNOWLEDGMENTS	i
ABSTRACT	ii
RESUMO	iii
LIST OF TABLES	vi
TERMS AND ABBREVIATIONS	vii
1. INTRODUCTION	1
2. REVIEW OF THE LITERATURE	3
2.1. <i>Born Globals in the International Entrepreneurship theory</i>	3
2.2. <i>Characteristics and distinctive features of the Born Global firm</i>	5
2.3. <i>Early and rapid internationalization of the born global firm</i>	6
2.4. <i>Role of the entrepreneurial team in the growth of the firm</i>	8
2.5. <i>Network relationships in internationalization</i>	9
2.6. <i>Dynamic capabilities in born global firms</i>	10
3. RESEARCH QUESTIONS	13
4. METHODOLOGY	14
4.1. <i>Why Case Studies</i>	14
4.2. <i>Identifying and selecting the cases</i>	15
4.3. <i>Data Gathering</i>	16
4.3.1. <i>Public Documentation about the Companies</i>	16
4.3.2. <i>Company Interviews</i>	17
4.4. <i>Procedure for ensuring the validity of the information</i>	18
4.5. <i>Analysis of empirical evidence</i>	19
5. CASE PRESENTATION	20
5.1. <i>Talkdesk</i>	20
5.2. <i>Feedzai</i>	21
5.3. <i>Climber Hotel</i>	22
6. CASE DISCUSSION	24
7. CONCLUSION	31
7.1. <i>Results and Contributions to the Theory</i>	31
7.2. <i>Limitations and Future research</i>	32
REFERENCES	33
APPENDICES	38

A1.	<i>Case studies interview guidelines</i>	38
A2.	<i>Case study protocol</i>	42
A3.	<i>Case descriptions</i>	43

LIST OF TABLES

Table 1 - Definition of study parameters.....	15
Table 2 – Information validity assurance	19
Table 3 - Case study protocol	42
Table 4 - Selected characteristics of the interviewees	43
Table 5 - Case studies description	43

TERMS AND ABBREVIATIONS

BSc – Bachelor of Science

CEO – Chief Executive Officer

CFO – Chief Financial Officer

CRM – Customer Relationship Management

CTO – Chief Technology Officer

CSO – Chief Science Officer

ESA – European Space Agency

FinTech – Financial Technology

IPN – Instituto Pedro Nunes

IST- Instituto Superior Técnico

MBA – Master of Business Administration

MNE – Multinational enterprise

MSc – Master of Science degree

PhD – Doctor of Philosophy

PMS – Property Management System

R&D – Research and Development

RMS – Revenue Management Software

SaaS – Software as a Service

Software deployment - all the process required for preparing a software application to run and operate in a specific environment

SME – Small and Medium size Enterprises

UPTEC – Parque de Ciência e Tecnologia da Universidade do Porto

1. INTRODUCTION

In the last years we have noticed a growing number of small firms becoming global players very quickly, often faster than larger enterprises, even though they lack of several type of resources. Additionally, these type of firms, entitled *born global* (Knight & Cavusgil, 1996; Madsen & Servais, 1997) quickly achieve a high percentage of international revenues very early from their creation (Oviatt & McDougall, 1994), having business prowess and superior performance. These firms challenge the traditional Internationalization theory of the Uppsala model, in which firms only seek international markets after having a strong presence in their domestic market (Johanson & Vahlne, 1977).

Previous research has shown that the appearance of this type of firms is a function of a new global and dynamic marketplace that was originated by several factors. Broadly speaking Globalization is by far the most important one since it marked trends, including the boost of trade and investment, making possible to reduce the costs of operating in several markets because of the technological progress in the areas of production, transportation and communication.

Performing business on a worldwide scale became easier due to the advances in technology that decreased the cost of international business, (Knight and Cavusgil, 2005) leading to the creation of new market conditions, that consequently led to the uprising of niche markets for small and medium firms.

Nevertheless, all this factors previous listed provided new capabilities for people, including the entrepreneurs and founders that build early internationalizing firms (Knight & Cavusgil, 1996; Madsen & Servais, 1997).

Globalization brought major implications for *born global* firms, being the most important one the ease of performing business in a worldwide scale and, therefore, there is an increase of the number of business opportunities around the world. With this worldwide dimension, there is also an increase of competition, from foreign competitors and more risks. The new buyers are also more demanding and, consequently, it is imperative for *born global* firms to engage in a proactive internationalization, which they do by taking advantage of communication technology (Knight and Cavusgil 2005).

The purpose of this work is to understand how and why Portuguese technological *born global* firms internationalize with success and to get a deeper learning of the relationship between their international entrepreneurial orientation and rapid internationalization.

The main goal of this research is to understand how the entrepreneurial team, the networks' relationships and dynamic capabilities influence a rapid internationalization of the *born global* firm.

This research is organized in seven chapters, being the first one this current introduction that concerns the field of study and the main purpose of this investigation.

The second chapter provides a review of the literature concerning the *born global* firm and its development, mainly with focus on the entrepreneur, the building and development of business networks and the dynamic capabilities of the firm.

The third chapter concerns the research questions and the fourth analyses the methodology in question. The case studies presentation is presented on the fifth chapter and in the sixth one it is depicted the case discussion. The last chapter of this dissertation outlines the main conclusions as well as the limitations of the study and future research.

The high dynamism of the contemporary business world, where dynamic capabilities and the ability to work alongside with the market needs are crucial for new businesses to be flexible and to respond to emergent opportunities.

Born global firms are achieving competitive advantage and business prowess very early from their creation, proving that managers and future managers have to learn with this new business. These type of firms are reshaping the global economy with their innovative posture and becoming global so fast is what makes these companies so intriguing.

2. REVIEW OF THE LITERATURE

This chapter focuses on the main subjects regarding this dissertation specifically: How does the entrepreneurial team influence the development of *born global* firms? How do network relationships influence a rapid internationalization? How do dynamic capabilities leverage a rapid internationalization of *born global* firms?

In particular, this section is divided in the following parts: i) *born globals* in the International Entrepreneurship theory; ii) characteristics and distinctive features of the *born global* firms, iii) early and rapid internationalization of the *born global* firm, iv) role of the entrepreneurial team in the growth of the firm, v) network relationships in internationalization and vi) dynamic capabilities in *born global* firms.

2.1. *Born Globals in the International Entrepreneurship theory*

Since Welch and Luostarinen (1988) defined a *born global* as an organization that aims to export immediately since its origin, this phenomena was further developed and other studies were conducted that are relevant to highlight (Welch & Luostarinen, 1988).

After that, another study recognised that a new type of firms called *born globals*, from different type of sectors of the Australian market, were competing successfully against well established players in international markets, although they lack of resources and size (Rennie, 1993).

Later on Oviatt and McDougall (1994) defined this new type of companies entitled *International New Ventures* as “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (Oviatt & McDougall, 1994, p. 49). Their work was a major contribution for the scientific community as they explained this new phenomena that was the opposite of the Uppsala Internationalization Model by Johanson and Vahlne (1977), in which firms gradually increase their international presence in foreign markets, after being well established in their domestic market (Johanson & Vahlne, 1977).

The emergence of this new type of enterprises, lead to a new field of research entitled international entrepreneurship (McDougall & Oviatt, 2000; McDougall & Oviatt, 2005; Zahra & George, 2002). McDougall and Oviatt (2000) define International Entrepreneurship as “a combination of innovative, proactive, and risk-seeking behaviour

that crosses national borders and aims to create value in organizations” (McDougall & Oviatt, 2000, p. 903). Other definitions followed and this field was proposed by Zahra and George (2002) as “the process of creatively discovering and exploiting opportunities that lie outside a firm’s domestic markets in the pursuit of competitive advantage” (Zahra & George, 2002, p. 11).

However, in 2005, Oviatt and McDougall redefined their previous definition by developing a model that encompasses factors that influence the speed of entrepreneurial internationalization. In their reformulated definition, international entrepreneurship is defined as “the discovery, enactment, evaluation, and exploitation of opportunities – across national borders – to create future goods and services” (Oviatt and McDougall, 2005, p. 540). This study emphasized the essential role of technology, motivating forces of competition, organizational knowledge and networks in explaining the speed of internationalization (Oviatt and McDougall, 2005).

More recently, Knight and Cavusgil (2004), define this type of firms as “business organizations that, from or near their founding, seek superior international performance from the application of knowledge-based resources to the sale of outputs in multiple countries” (Knight & Cavusgil, 2004, p. 124).

Nonetheless the contributions to the literature made by several authors, which resulted in different definitions that take into consideration different factors to classify these firms, there is still a need to unify and improve these definitions (Knight & Liesch, 2016). Empirical research regarding the *born global* phenomenon has been undoubtedly, richer than the attempt to develop cohesive theories (Rialp et al., 2005).

Knight and Liesch (2016) claim that the uniformization of gaps and incongruences in the existent literature can benefit knowledge on international strategy, entrepreneurship, internationalization and other similar areas (knight & Liesch, 2016). Moreover these authors state that scholarly hasn’t been made an effort to understand the effects of variables associated with organizational environment and context, resources, strategies and capabilities that influence performance and long term growth of *born global* firms (Knight & Liesch, 2016). Empirical research is also lacking, concerning the later life of these firms (Cavusgil & Knight, 2015).

Dzikowski (2018) performed a bibliometric analysis of *born global* firms, to try to know better the structure and dynamics of this field and he identified five clusters from

the most cited references that explain this phenomenon, which include: internationalization process, entrepreneurial approach, new venture internationalization, network views and organizational capabilities (Dzikowski, 2018).

In this research the definition taken in consideration regarding the *born global* firm is the one proposed by Andersson and Wictor (2003), which affirms that a *born global* is “a company that has achieved a foreign sales volume of at least 25% within 3 years of its inception and that seeks to derive significant competitive advantage from the use of resources and the sales of outputs in multiple countries”(Andersson & Wictor, 2003, p. 254).

2.2. *Characteristics and distinctive features of the Born Global firm*

Although small and resources constrained (Freeman, Edwards, & Schroder, 2006; Knight & Cavusgil, 2004; Oviatt & McDougall, 1994), *born global* firms are strikingly competitive in a global economy, competing against large established players in the market (Rennie, 1993).

Found across most industries (Rennie, 1993), one of the main characteristics of these type of firms is their early and rapid internationalization from or near founding (Cavusgil & Knight, 2009; Knight & Cavusgil, 2004; Weerawardena, Mort, Liesch, & Knight, 2007).

Born global firms are created by entrepreneurs that possess a global vision from the start (Oviatt & McDougall, 1995) and an international entrepreneurial orientation (Knight & Cavusgil, 2004), which reveals a proclivity to take risks and a proactive competitive posture when seeking foreign markets. This distinctive orientation allows them to create processes and practises, that are linked with successful entrance in international marketplaces (Knight & Cavusgil, 2004). In fact, the creation of this unique firms is related with the development of new products and services (Cavusgil & Knight, 2009, p. 12), created by the previous mentioned entrepreneurs. *Born globals* hold a technology prowess and tend to develop and offer unique products with superior quality, (Knight & Cavusgil, 2004) oriented to niche markets, which can be too small to interest large companies. They usually make use of a differentiation strategy (Porter, 1980) and

when employing this strategy, they are stimulating customer loyalty by satisfying a particular need (Cavusgil & Knight, 2009, p. 12).

What makes these companies so interesting and helps them to succeed is a distinctive type of culture, which is characterised by innovation, risk taking capacity, flexibility and, most importantly, a general learning orientation (Hartsfield, Johansen, & Gary, 2008). Knight and Cavusgil (2004) found that *born global* success is a function of employing specific orientation and strategies (Knight & Cavusgil, 2004). These are intangible resources and capabilities that represent skills, know-how and experiences that the managers of these firms possess (Knight & Cavusgil, 2004).

Born globals, as opposed to multinational enterprises (MNE) that are well established in the market, lack a robust administrative heritage and hierarchy (Cavusgil & Knight, 2009, p. 56) which gives them flexibility to react and adapt to emergent opportunities. They also create routines that are very flexible and can be changed very easily according to the needs of the different foreign markets (Knight & Cavusgil, 2004).

Born global firms competitive advantage relies on addressing opportunities really quickly, by using a first mover approach to enter new markets, as well as getting new customers and expand internationally to several markets (Freeman et al., 2006).

2.3. *Early and rapid internationalization of the born global firm*

Becoming international these days is no longer a barrier but rather a necessity for every business. The twin trends of globalization and advances in technology have made early internationalization a reality for many *start-up* firms (Cavusgil & Knight, 2015).

An extensive study carried out by Rialp, Rialp and Knight (2005) recognized numerous factors, internal or external to the firm, that were critical in their early internationalization and performance (Rialp, Rialp, & Knight, 2005). These include: i) a managerial team that has a global vision since the creation of the firm, as well as a high degree of previous international experience, ii) willingness to become international and to succeed abroad held by the managers, iii) reliance on personal and business networks, iv) market knowledge and commitment, v) unique intangible assets based on knowledge management, vi) development of unique and distinctive products with superior quality, vii) targeting of niche markets, viii) strong customer and market orientation and ix)

flexibility to adapt to fast external conditions, specifically in foreign markets (Rialp, Rialp, & Knight, 2005). These authors also developed a theoretical model to explain early internationalizing firms, which focused on the firm's intangible resources, including technological, organizational, relational and human capital, combined with the firm-specific international capabilities, which derived from learning processes and international oriented routines (Rialp et al., 2005). Finally, they also take into consideration the external environmental conditions of the firm, including type of sector, geographic setting and local international networks, which influence the strategic orientations of early internationalizing firms (Rialp et al., 2005).

Scholars also recognized specific orientations and strategies adopted by *born global* firms that are associated with early internationalization. These include learning, entrepreneurial, market and global orientation as well as commitment to International Business (Cavusgil & Knight, 2015; Freeman et al., 2006; Rialp et al., 2005).

Knight and Cavusgil (2004) performed a qualitative methodology to study 32 *born globals* and found out that using marketing strategies is crucial for their international success (Knight & Cavusgil, 2004). These authors also recognized that these firms employed a product differentiation strategy, meeting the requirements of specific needs and, therefore, achieving customer loyalty (Knight & Cavusgil, 2004). The ability to create unique products and position them to niche markets, seems to be connected to superior international performance, by pushing away competition, allowing these firms to have a type of monopolistic advantage (Knight & Cavusgil, 2004). In the same study they reached the conclusion that an innovative culture that characterizes this firms also gives rise to early internationalization.

Additionally, several scholars focused on the role of network relationships, alliances, collaborative partnerships and other social capital in the international performance and internationalization of the born global firm (Cavusgil & Knight, 2009; Coviello, 2006; Coviello & Cox, 2006). Cavusgil and Knight (2009) suggest that global network relationships are another factor that enables early internationalization, since network linkages with strategic partners are a way to obtain advantages abroad (Cavusgil & Knight, 2009, p.18).

In international activities, *born global* firm's lack of rigidities can be a big advantage, giving the firm flexibility and agility, which are relevant characteristics for foreign expansion (Cavusgil & Knight, 2009, p. 57).

A superior international performance in *born globals* is associated with the possession the international entrepreneurial orientation, strong focus and/or differentiation strategies and strong marketing capabilities (Hartsfield et al., 2008). Numerous studies reported the previous mentioned orientation as a possible precursor of early internationalization.

2.4.Role of the entrepreneurial team in the growth of the firm

The entrepreneurial team of *born global* firms shapes the growth and future of the firm by adopting the right strategies.

Scholars reported that *born global* founders have an international outlook combined with a strong entrepreneurial orientation (Knight & Cavusgil, 2004; Madsen & Servais, 1997) that helps firms on its global expansion since this is a process characterized by adversities and uncertainties. This entrepreneurial mindset allows the development of “processes, practices and decision-making activities” related with successful entry into new markets (Lumpkin & Dess, 1996, p. 136). *Born global* founders proactively engage in the internationalization process of the firm and have propensity for risk-taking (Acedo & Jones, 2007; Zhou, 2007). Furthermore, they possess high academic qualifications, they have knowledge about foreign markets, either by working or having experiences abroad and maintain a network of international contacts (Oviatt and McDougall, 1995; Madsen and Servais, 1997). These characteristics allow the identification of global opportunities, gather knowledge about the market and, therefore, quickly enter international markets.

Their previous professional and international experience allows the accumulation of relational capital and leverage the internationalization process, since it leads to a bigger absorptive capacity in the firm which enables acquisition of additional knowledge (Weerawardena, Mort, Liesch, & Knight, 2007). As a consequence of their previous experience, these entrepreneurs usually have well developed management and marketing capabilities (Simões & Dominginhos, 2001, p.6).

Moreover, research revealed that these global entrepreneurs possess unique scientific knowledge about a technology or process and, therefore, are able to develop unique and innovative products with high value (Simões & Dominginhos, 2001, p. 6) They also hold a visionary capability, which represents a clear definition of the business idea and the aspiration to transform it in a company (Andersson & Wictor, 2003; Oviatt & McDougall, 1995).

The entrepreneur plays undoubtedly a major role in the *born global* firm, due the knowledge that he possesses and most importantly, the strategies and orientations that he chooses for the *born global* firm.

2.5 Network relationships in internationalization

Several researchers emphasized the critical role of networks in the internationalization process of the *born global* firm (Bell, 1995; Coviello & Munro, 1997).

Network relationships influence the internationalization process of the *born global* firm, since they affect the choice of selecting the first country to approach and the type of entry (Coviello & Munro, 1997). Furthermore, these relationships trigger international business opportunities due to the fact that they gather knowledge information about external markets, therefore reducing the risk of internationalization (Johanson & Vahlne, 2003, 2006; Madsen & Servais, 1997).

Networks provided access to several important resources such as, financing, markets and customers, distribution channels and contacts for both internal and external development in the born global internationalization (Coviello, 2006; Coviello & Cox, 2006).

A study conducted by Freeman et al. (2006) emphasized that *born global* firms can overcome constraints to international business by leveraging networking competencies to develop alliances and collaborative partnerships (Freeman et al., 2006).

Coviello (2006) noted that the resources acquired due to the firm's network helped the *born global* before internationalization, from the early company development and also through the process of the internationalization (Coviello, 2006). The first partnerships and alliances are even established using the personal networks of the entrepreneurs (Freeman et al., 2006)

Falahat et al. (2015) performed a study based on network perspective and dynamic capability view to explain the internationalization of *born global* firms (Falahat, Migin, Chuan, & Kong, 2015). In their work, networking capabilities, are stated as the routines through which firms learn from numerous sources of knowledge, including customers, suppliers and other companies, regarding foreign markets. The acquirement of this important knowledge, is crucial for building marketing competencies to achieve a rapid and superior performance in international markets (Falahat et al., 2015). Network capability also provides the opportunity to generate ideas that can be used in the development of knowledge intensive products, as well as learn about market conditions (Falahat et al., 2015).

Therefore, it can be stated that network capability is related to a fast internationalization (Falahat, Migin, Chuan, & Kong, 2015).

2.5. *Dynamic capabilities in born global firms*

Small firms aiming to achieve accelerated internationalization must develop a strategic set of dynamic capabilities (Weerawardena et al., 2007).

The term dynamic capabilities represents the ability of a firm to integrate, build and reconfigure internal and external competences to address rapidly changing environments (Teece, Pisano, & Shuen, 1997).

More recently Teece (2007) affirms that dynamic capabilities can be disaggregated in three distinct classes: i) the capability to sense and shape opportunities and threats, ii) the ability to seize opportunities and iii) to maintain competitiveness by making changes and transformations in the assets of the firm (Teece, 2007, p.1319). To achieve success, all three classes of capabilities must be built and used almost at the same time by the firm (Teece, 2007).

From a dynamic capabilities view, the capabilities built by managers with an entrepreneurial orientation influence early internationalization (Weerawardena, Mort, Liesch, & Knight, 2007).

This study aims to report *born global* firms as companies that systematically seek to develop new and strategic capabilities to achieve superior performance and achieve competitive advantage internationally. Therefore, dynamic capabilities are particularly

important for these firms since they deal with a wide range of challenges when addressing the complex foreign markets.

A recent study by Weerawardena et al. (2007) proposes a conceptual framework based on dynamic capabilities to explain *born global* firm's accelerated internationalization (Weerawardena et al., 2007). According to this research, the capabilities building process is determined by the entrepreneurial team that systematically builds new and strategic capabilities, adapting itself to the changes.

Weerawardena et al. (2007) highlights four dynamic capabilities that influence a rapid internationalization: i) market-focused learning capability, ii) marketing-focused learning capability, iii) internally focused learning capability and iv) networking capability (Weerawardena et al., 2007). Their view also takes into account the organizational learning theory and, consequently, they argue that the firm must learn from different sources, which generates knowledge in order to achieve an accelerated internationalization.

It is required to explain the previous exposed capabilities and their importance for the *born global* firms. The market-focused learning capability entails the ability to integrate market information into valuable knowledge that managers can use to compete successfully in foreign markets (Knight and Liesch, 2002). Proximity to markets and customers contributes to a rapid internationalization of the firm (Knight, 2001), therefore, *born global* firms usually focus on their markets in order to acquire market knowledge that can be used to improve value adding activities.

Many *born global* firms have superior marketing capability (Knight & Cavusgil, 2004; Weerawardena et al., 2007), which is characterized by the firm's capacity to efficiently formulate marketing strategies and is crucial to effectively target foreign markets (Knight, 2001). It involves placing products in niche markets (Madsen & Servais, 1997), gather knowledge about the consumers, positioning, pricing and distributing products correctly as well as research and development of new products (Knight & Cavusgil, 2004).

The third capability is the ability to transform technological and non-technological information, generated internally, into valuable knowledge that a firm can use to achieve a stronger performance in international markets.

The last capability present in Weerawardena (2007) model is the networking capability, which facilitates the acquisition of knowledge and development of complementary resources (Weerawardena et al., 2007). Numerous academics reported that *born global* firms usually rely on networking capability to ease an early internationalization and good performance in foreign markets, since this capability can trigger the discovery of business prospects and acquisition of important information thus reducing the risk of entering foreign markets (Bell, 1995; Coviello & Munro, 1997; Johanson & Vahlne, 2006).

3. RESEARCH QUESTIONS

The current overview of the born global phenomenon is studied by several researchers and scholarly has been made an effort to explain these firms using different theories such as the recourse-base view, organizational learning theory and dynamic capabilities view.

This dissertation focuses on the role of the entrepreneurial orientation in the rapid internationalization of three technological *born global* firms. This work aims to understand this orientation in three main aspects: the entrepreneurial team, network relationships and dynamic capabilities.

Q1: How does the entrepreneurial team influence a rapid internationalization of the *born global* firm?

Q2: How do network relationships influence a rapid internationalization of *born globals*?

Q3: How do dynamic capabilities leverage a rapid internationalization of *born global* firms?

4. METHODOLOGY

The following dissertation uses a multi case study method to better understand the rapid internationalization of three technological *born global* firms. In this chapter are portrayed five parts, being the first one the explanation for the used methodology. The second one addresses the process for the investigation and the third and fourth concern the data gathering and the procedure for ensuring the validity of the information, respectively. Finally, the fifth part reports the achieved results.

4.1. *Why Case Studies*

The methodology to use in a research project depends on the investigation goals. When the main purpose of an investigation is to answer the questions of “how” and “why”, the researcher has little control over events and the focus is on a contemporary phenomenon within some real-life context, thus case study methodology is the most appropriate one (Yin, 2003).

Moreover, when beginning to study a new phenomenon, or when in need of a new point of view about one that was previously studied, this methodology is also the most suitable one (Eisenhardt, 1989).

This approach implies the definition of the research questions, selection of the cases to study and the combination of several methods to gather information (Eisenhardt, 1989). The data is collected through interviews, news and company documents allowing, at the same time, to get a deeper learning about the company (Eisenhardt, 1989). Therefore, more information is crossed, reaching a bigger level of confidence (Eisenhardt, 1989).

In this dissertation I am interest in understanding how technological *born global* firms internationalize with success and why these firms achieved a rapid internationalization, having the goal of identifying which factors and events lead to this behaviour. In order to have a more consistent analysis for this investigation, I decided to perform a multi-case study research. It is important to listen to the “actors” involved in the events and the identification of the relationships that occurred in the process.

4.2. *Identifying and selecting the cases*

As reported by Yin (2003), a multiple case study is preferred, since it offers a bigger external validity and it allows the comparison between the results obtained (Yin, 2003).

According to Miles and Huberman (1994) four parameters should be considered when choosing the cases: the target, the actors, the events and the processes (Miles and Huberman, 1994). Their importance in this dissertation is represented in Table 1 (definition of study parameters).

Table 1 - Definition of study parameters

Parameter	Selection
Target	Technological <i>born global</i> firms with early, fast and rapid internationalization
Actors	Founders, co-founders and managerial team
Events	Growth of the company and renew of dynamic capabilities
Processes	Creation of the company, growth, international performance

Source: Adapted from Miles and Huberman (1994)

For selecting the cases a few steps were followed. First of all, the creation of a general list of potential technological companies to study that I knew, since I was familiar with the general entrepreneurial Portuguese ecosystem, and that would appear in the news more often because of their success. This step made possible to identify six companies that seemed to reach a global position very early.

The second action performed was an online search in several Portuguese websites of startup incubators, such as Startup Lisboa, Instituto Pedro Nunes (IPN), Startup Braga and Parque de Ciência e Tecnologia da Universidade do Porto (UPTEC Porto), in specific websites, such as the Tech Tour Growth 50 and also searching for news about Portuguese startups.

After collecting information about a few technological companies, the previous list was updated with more data regarding the firms, this time including the year of creation, the sector of activity, the entrepreneurs and the foreign revenues. This list was then analyzed with special incidence regarding the unique technological products that the companies sold, as well as their rapid growth. This process allowed the selection of eight

technological *born global* firms. One of them was contacted right away by e-mail but was not interested to participate in my study.

Therefore, this dissertation focuses on three technological *born global* firms, one from the Finance and Technology (FinTech) industry, another one from the call center business and the last one from the hotel industry.

4.3. Data Gathering

A case study helps to understand and develop a phenomenon in real life situations and not its initial identification (Yin, 2003).

To have a more reliable data, a method of triangulation (Jick, 1979; Yin, 2003) was made using public documentation about the firms, as well as the interviews to the founders or managers, in order to detect inconsistencies and discrepancies. Moreover, this task allowed the possibility to get to know the companies better, their creation and path, as well as support the case study interview guidelines.

4.3.1. Public Documentation about the Companies

The major sources of information were public documentation about the companies, interviews performed to the entrepreneurs and attendance of two different events, in which two of the companies studied were represented by the founders. The use of three different sources of information provided support to recognized incongruences or biases contained in the public documentation. This one was collected by searching for online news, articles in magazines and newspapers, online videos and also in other works and presentations made about these firms. This was a crucial step for the research project, since it was easier to understand the firm's path and set a chronological order of the main aspects of the firms. Simultaneously, it proved to be essential for the interview, since it made possible to adapt the case study interview guidelines for each firm.

However, in the case of Talkdesk and Feedzai, I had the chance to attend two different events in which Cristina Fonseca and Nuno Sebastião were speakers. I listened to Cristina Fonseca in the conference "Female Intuition and Entrepreneurship, Women and Entrepreneurship in Portugal", held by Entrepreneurs' Organization, that took place on the 10th of April 2018 in Lisbon and gave me the opportunity to learn more about Cristina's journey as an entrepreneur, and talk to her regarding my research project, where

we exchanged contacts. She agreed to help me in my research and the next step was to send her an email with a proposition to schedule a suitable date for the interview. Regarding Feedzai, I attended a multidisciplinary debate and discussion entitled “Portugal and the Startups: risks, opportunities and the role of the Government”, organized by the Institute of Public Policy at Instituto Superior de Economia e Gestão (ISEG), on the 28th of June 2018, in which Nuno Sebastião took part. This was a very interesting discussion, which focused on the public policies to support the Entrepreneurship and the Startups in Portugal, giving me the opportunity to learn more about Feedzai and the entrepreneur behind it.

Unfortunately, I didn’t had the chance to talk personally with Nuno Sebastião, but I sent him an email explaining that I attended the debate and that I would like to study Feedzai. Nuno forwarded my email to Filipe Neves, current Chief Financial Officer (CFO) of Feedzai, which also agreed to help me and we exchanged some emails to schedule a date to the interview.

The presence in these two events was crucial to my dissertation because it facilitated the contact with the companies.

4.3.2. Company Interviews

The interview is the most commonly used method in qualitative research (Edwards & Holland, 2013). Qualitative researchers make use of semi-structured and unstructured interviews, since these ones are characterised by a bigger flexibility and lack of structure (Edwards & Holland, 2013).

In this research semi-structured interviews were performed due to the fact that there is flexibility in how and when the questions are launched and how the interviewee can answer them (Edwards & Holland, 2013). Besides, the interviews offer some strengths, such as the fact that they are targeted, focused on the case study topics and are insightful, providing perceived causal inferences (Yin, 2003).

The semi-structured interviews were conducted using a questionnaire divided in six parts, initially developed by Hashimoto (2011) regarding the *born global* firms’ growth and survival in the Finish software industry, but adapted to this investigation goals (see Appendix A.1) (Hashimoto, 2011). After that, a discussion with my thesis supervisor

followed to analyse the questionnaire and see if it needed some modifications. We reached the conclusion that some modifications should be made, which was the following step.

The interviews were performed between May and October of 2018 and each one lasted approximately 60 minutes. The aforementioned interviews were recorded considering the agreement of the interviewees using audio support and, afterwards, transcribed following the case study protocol to ensure the validity of the information (Yin, 2003). The goal was to do an interview to at least one founding member of the three companies and this was possible in two cases. In the case of Talkdesk the interviewee was Cristina Fonseca, which was co-founder of the company. For Climber Hotel the interviewee was Mário Mouraz, co-founder and currently Chief Executive Officer (CEO) of the company. Regarding Feedzai the interviewee was Filipe Neves, current CFO since it was not possible to interview any founding members of the company. When it comes to the interviews, Talkdesk's and Feedzai's were both conducted face to face, taking place in ISEG and Feedzai's office in Coimbra, respectively. In the case of Climber the interview was made using digital media. The first two interviews were more fruitful, since it was possible to clarify some aspects right away.

After this procedure, the next step performed was a small search concerning some technological terms that were less familiar and I asked for additional explanation to the interviewees for some clarification regarding what they said.

Both the case study protocol and the characteristics of the interviewees can be found in Appendix A.2. and A.3, respectively.

4.4. Procedure for ensuring the validity of the information

The construction of the case studies had to follow a set of procedures in order to ensure the validity of the information acquired, since the interpretation of the collected data is a crucial element in this process (Yin, 2003).

The procedure to ensure the information validity suggested by Yin (2003) focuses on four components: i) construct validity, ii) internal validity, iii) external validity and iv) reliability. The second table (information validity assurance) contains the used techniques to assure the validity of the information acquired.

Table 2 – Information validity assurance

Criteria	Used techniques
Construct validity	Use of different sources of information
	Establishment of a chain of evidence
Internal validity	Identification of common patterns
	Explanation of the common relations found in the cases
External validity	Usage of a replication logic in the various case studies
Reliability	Usage of a case study protocol
	Creation of an archive with all the information about the case studies

Source: Adapted from Yin (2003)

4.5. Analysis of empirical evidence

Every case was written by analysing the collected information and writing conclusions based on the facts gathered from these information.

After this procedure a replication logic was conducted so that it was possible to identify common patterns among the cases (Dominguinhos, 2007).

For the creation and discussion of the cases, quotes by the founders were used to strengthen the conclusions and to better explain the ideas of the interviewees.

5. CASE PRESENTATION

In this chapter it is represented a brief presentation of the companies studied, specifically what led to their creation and how their development occurred.

The analysis and discussion of the case studies is made in the next chapter according to the research questions.

5.1. *Talkdesk*

Talkdesk was founded in 2011 by Tiago Paiva and Cristina Fonseca and it has revolutionized the call centre industry. Graduated with a Master Science course (MSc) degree in Telecommunications and Networks Engineering from Instituto Superior Técnico (IST) of Lisbon University, both engineers soon got interested in following the Silicon Valley technological ecosystem, since their time as students, by reading blogs and listening podcasts, as well as trying to understand how one day they could get there.

This involvement in the biggest entrepreneurial ecosystem in the world made Tiago aware of a *start-up* competition that would later lead to the creation of Talkdesk. Everything started when the entrepreneurs were part of *Twiliocon*, a hackathon organized by the cloud communication platform company, *Twilio*. The duo pitched their idea, which was designed to revolutionize the call centre and customer support industry, known for being expensive and hard to implement, “*At that time everything was in the cloud: Customer Relationship Management (CRM) and Billing systems were moving to the cloud, so we decided to add phones to the cloud too*” said Cristina Fonseca.

The audience that listened to their pitch was composed by potential investors, venture capitalists, incubators and companies from Silicon Valley. Talkdesk won the entire competition and secured \$50.000 in seed funding from venture firm “500 Startups”, as well as a place in their acceleration program. The developed application resulted in the first prototype of Talkdesk.

Being part of an acceleration program gave them access to knowledge from people with experience in the technological and entrepreneurial ecosystem, as well as to mentors and venture capitalists that could introduce them to clients, since they already had a big and fruitful network.

Talkdesk makes the Software as a Service (SaaS) that aims to improve customer success in any company, while increasing efficiency. The cloud-based call centre solution provided is very easy to implement in any business, since it doesn't demand hardware, phones, coding or even downloads. All that is required to set up this solution is a computer and Internet connection. Additionally, this solution gives managers the possibility to make data driven decisions since these can use real-time and historical reporting, as well as call recording and monitoring, improving the customer experience. The possibility to integrate Talkdesk with other customer software services, such as *Salesforce*, *Zendesk*, *Zoho* and other CRM systems is definitely a benefit for the clients that choose Talkdesk.

Nowadays, Talkdesk has 400 employees and among their clients are IBM, Dropbox, Peet's Coffee and apparel store Zumiez. Known as one the most recognizable names in the call centre industry, the company has offices in the United States of America, United Kingdom and Portugal and aims to grow its global operations and sales.

Talkdesk will continue to disrupt the contact centre industry through innovation and to stay ahead regarding the customer engagement field.

5.2. *Feedzai*

The concept to start Feedzai appeared in 2008 as a result of a research project conducted by Paulo Marques and Pedro Bizarro, with the collaboration of Nuno Sebastião, who, at the time, was a *Technical Officer* at European Space Agency (ESA). The entrepreneurs knew each other well, since they attended the same university and one they got together to discuss a research project. With a strong set of hard-skills in computer engineering soon this team, saw that a “*piece of code allowed to process a very big quantity of data in real time with a small latency*” (Filipe Neves, Feedzai) could be a potential business idea.

Feedzai always had a strong connection to the academic world since all the entrepreneurs studied in Coimbra University and Pedro and Paulo even attended Carnegie Mellon University as teachers and researchers. Later on the company was established in Instituto Pedro Nunes (IPN), which aims to bring companies and the university closer.

The company was officially established in 2009, having its founders an aspiration of global expansion for the firm. “We started to have international sales from an early stage of the firm (...), said Filipe Neves.

This data science company uses machine learning and artificial intelligence to analyse a big amount of data, as well as detect and prevent fraud management in electronic transactions. Nowadays, this FinTech company is focused in providing its antifraud solution for the banking, financial, payments and e-commerce sectors. However, the strategy to focus on this market niche was not conducted right away, and in the beginning the managers tested the solution in three different verticals: financial services, utilities and telecommunications. Only after this experience it was decided to focus completely in financial services.

Feedzai’s technology helps its customers to detect fraud behaviours through the development of consumer behaviour patterns when shopping, reducing online and offline risk.

The main customers of the firm include major financial institutions, such as Capital One, Citi, First Data, Coca-Cola, Ericsson and e-commerce multinational companies.

The future is bright for Feedzai, proving that excellent technology can surpass borders with the goal to enter adjacent markets and a feasible path to continue the geographic expansion of the firm by setting a solid footprint in Europe, Australia and Asia, always with the vision of making commerce safe.

5.3. *Climber Hotel*

Created in 2015, Climber Hotel is democratizing Revenue Management (RM) for small chains and independent hotels through an automatic and self-learning software, improving their revenue.

The RM software provider firm strongly believes that the bigger hotels and chains shouldn’t be the only ones having access to RM solution in order to improve hotel yield management plans.

Mário Mouraz and João Pedro Feliciano are the dynamic duo behind Climber and this one wouldn’t have been created without their complementary skills. With a small domestic market in Portugal, the entrepreneurs created the company with a global

mindset, “(...) *portuguese market is too small, when it comes to the number of hotels (...)*” (Mário Mouraz, Climber Hotel).

Mouraz brought his expertise and experience regarding the Tourism and Hotel sector, as well as his passion for this field and previous entrepreneurial experience, since he created two other companies in the tourism sector before starting Climber. Feliciano, on the other hand, brought his know-how of eighteen years of experience as a software engineer, “(...) *without the experiences that we both had we wouldn't be where we are today. So Climber's success is an accumulation of technical experiences, acquisition of skills and knowledge of the market as well as having the right mindset to start a business.*” (Mário Mouraz, Climber Hotel).

The idea for the creation of the company derived from Mario's second company, a platform that aggregated tourism data, which was then analysed and sold back to the hotels. Speaking directly with hoteliers, Mouraz understood that they wanted a practical solution for this data and this is how he saw a business opportunity, “(...) *something that we did from the beginning was to understand the very well the market, by making market analysis and questionnaires... this step was very important to know what was important for a software management(...)*” (Mário Mouraz, Climber Hotel). He then decided to create an automatic software that would help small hotels to optimize the pricing for the hotel industry, taking into account different variables that influence the daily management of a hotel, contributing to maximize its revenue. He found out that the small hotels and independent chains didn't have access to Revenue Management Software (RMS) solutions, since these have a high cost and are very complex.

The RMS solution takes historic data from hotel's Property management solution (PMS), combining it with the market demand and reports the real status of hotels, therefore saving time and selling more and better.

Headquartered in Lisbon, Climber has an international team of fourteen people from different fields of expertise and its solution is used by forty one hotels in Portugal, Germany, United Kingdom and Asia. The goal is to consolidate the presence in the European market and, in the near future they want to expand to the United States, which is a bigger and appealing market.

6. CASE DISCUSSION

In this chapter it is made an analysis and discussion of the case studies regarding the three research questions that focuses on the entrepreneur, business and personal networks, as well as dynamic capabilities influencing a rapid internationalization. The results found are compared with the existing literature.

6.1. *How does the entrepreneurial team influence a rapid internationalization of the born global firm?*

This research question leads to the field of International Entrepreneurship and aims to understand how the entrepreneurial team influences the growth and rapid internationalization of the *born global* firm.

It was possible to conclude that certain team characteristics are conducive of a successful internationalization and business prowess. These characteristics are: i) global vision, aligned with a strong international entrepreneurial orientation, ii) previous work, international and entrepreneurial experience, iv) academic qualifications and v) risk taking and innovative mindset.

In the case of Talkdesk, it was possible to see the global vision of the founders that saw the world as the marketplace for their firm since its creation. Cristina Fonseca highlighted that having a global vision was essential to Talkdesk's success: "*The reason why we are where we are today is that we were born global from day one (...) we never thought that the Portuguese market was enough to scale our product (...)*". Regarding Feedzai, "*our product was not created just to address the Portuguese market, which is too small*", emphasized Filipe Neves. Concerning Climber Hotel, Mário also shared the same perspective when he created Climber, "*(...) we wanted to be Born Global since the beginning and this was what we did. All the documentation we have is in English and this is the language we use inside Climber, since we also have a multicultural team.*"

When it comes to the academic background, both founders of Talkdesk hold a MSc in Telecommunications and Networks Engineering from IST and, when speaking about Feedzai's team, two co-founders have a Doctor of Philosophy (PhDs) degree in Computer Science and Informatics Engineering, and Nuno Sebastião holds a MSc in Computer Science, as well as a Master in Business Administration (MBA) from London

Business School. When it comes to Climber's entrepreneurial team Mário Mouraz holds a BSc in Management from Instituto Superior de Contabilidade e Administração de Lisboa (ISCAL), a MSc in Tourism and Hospitality Management from EADA (Escuela de Alta Dirección y Administración) Barcelona and he did an MBA Exchange program in CENTRUM - *Pontifica Universidad Católica del Perú*. On the other hand, João Feliciano, graduated with a Computer Engineering degree from Nova University of Lisbon.

These findings are in accordance with the existent literature view that the global vision and high academic qualifications of the founders benefit the *born global* expansion (Oviatt & McDougall, 1995; Madsen & Servais, 1997).

Although Talkdesk's team didn't have previous international experience, only one member of the founding team enrolled in an Erasmus exchange program in Sweden, both founders worked together in a project that they started by their own initiative, that gave them valuable business skills that they later used in the creation of Talkdesk. Regarding the case of Feedzai, the previous experience was a big advantage for the company, since all the founders had previous international experience, either by working or by studying abroad, and two of them were also involved in the creation of other companies before they established Feedzai.

In the case of Climber Hotel, Mário had previous international and entrepreneurial experience. Before creating Climber, he founded two other companies related to Tourism and Hotel industry, worked in hotels in Spain, Peru and London and collaborated on building sustainable hotels in Iran and even worked in Burkina Faso for one year. This ability to take risks gave him the skills required to succeed in his businesses. On the other hand, João Pedro Feliciano had a large experience working as a Software Engineer by working in different and interesting projects.

This initiative from the entrepreneurs is aligned with the literature view that *born global* founders have an international entrepreneurial orientation, which is reflected in the proclivity to take risks and a tendency to innovate, which leads to the development of new ideas within the firm (Cavusgil & Knight, 2009, p. 11). These findings also suggest that previous international experience benefits the *born global* firm expansion to other markets (Oviatt & McDougall, 1995; Weerawardena et al., 2007).

It is possible to summarize that the entrepreneurial team has a direct influence in the rapid internationalization of the *born global* firm due to their mindset and learning and entrepreneurial orientation, ability to execute and launch a distinct product in the market with superior quality, as well as using a first mover approach. A better performance of the *born globals* is connected to their managers and entrepreneurs, which make use of their managerial vision and managerial and knowledge creation competence.

6.2. How do networks influence a rapid internationalization of Born Global firms?

In all the case studies it is noticeable that networks played a major role, whether it was in the beginning or in the rapid growth of the company.

The personal networks of the entrepreneurial team were essential to get the first clients and performing the first sales.

Regarding Talkdesk, being part of the 500 Startups' seed program, was an opportunity to have access to several resources, highlighted Cristina Fonseca: *"the acceleration program played a major role leveraging assets through its network (...) We had the chance to receive feedback from a lot of mentors with experience in the Silicon Valley ecosystem"*. Furthermore, Talkdesk's investors were part of a big network, giving the founders access to several resources: *"(...) investors will present you to future clients by giving you the opportunity to present your product (...)"*, mentioned Cristina Fonseca. In the case of Talkdesk, Cristina also emphasized that in the beginning the main customers were technological, since they needed a fast solution to offer their customers phone support: *"(...) In the beginning it was easier to sell to technological customers because they are willing to take risks and want a solution to work fast. If you need a call centre you are not going to spend six months negotiating with a big corporation because you don't have the time to negotiate"*. Moreover there is also a big difference between the American and the European market, being the first one easier to sell, which was why this was the main market on an early stage: *"(...) In United States companies are really quick to make a decision and in the beginning you need to test your product and need companies that are fast in adopting your solution and giving feedback. In Europe this doesn't happen so fast, generally speaking and not either in the call centre market"*.

Filipe Neves shares a similar vision and highlights the importance of building strong relationships and, most importantly, to know when and how to use them: “ (...) *your personal network might open doors to new clients or new markets or even unblock some legal or bureaucratic matters that you need to unblock (...) Having those connections is very important because people sometimes even with just a phone call they unlock things for you (...) the first persons you are going to talk to sell your product or service are people you already sold something to in the past or with which you had a previous connection.*” Additionally, when Feedzai needed to outsource part of the software deployment, they chose a company with which they had a strong business connection, “(...) *it was a trust matter*”, said Filipe Neves. Feedzai sells enterprise software, thus network capability is an important matter for the firm.

In the case of Climber Hotel, Mário emphasizes the importance of his personal network that he built over time by creating his other two companies before and by working and living abroad: “(...) *by the time I was creating Climber we already had a huge network in Portugal, especially in the hotel field that would allow us to easily prototype and validate the Minimum Value Product.*” He also highlighted the significant role played by the advisors and mentors, which he and his team met in the accelerators’ programs: “(...) *mentors and advisors were a critical resource with which we wouldn’t have got so far without them, as well as our participation in those programs.*”

These findings display how network relationships enable acquisition of knowledge and give access to resources and business opportunities (Bell, 1995; Coviello & Cox, 2006; Coviello & Munro, 1997). Additionally, this is also consistent with the view of Freeman et al. (2006) view who claimed that *born global* firms overcome the lack of resources by building strong partnerships (Freeman et al., 2006).

Network capability is essential to trigger a rapid internationalization (Falahat et al., 2015).

Managers of the studied *born globals* proactively seek new markets, customers and business opportunities by using their personal and business relationships.

6.3. How do dynamic capabilities leverage a rapid internationalization of Born Global firms?

The goal of this research question is to understand how dynamic capabilities advance to a rapid internationalization of the *born global* firms.

Analysing all the case studies it was possible to reach the conclusion that their rapid internationalization and international success is due to the ability to nurture, build and reconfigure several capabilities as well as, by using specific strategies and orientations.

The main capabilities found were: i) internally focused learning capability, ii) market-focused learning capability and iii) marketing capability. The strategies and orientations adopted by the firm were: i) cultivate an innovative culture within the firm and ii) hire people with skills and know-how.

First, the internally focused learning capability of the firm, which represents the ability to transform information into valuable knowledge, that managers can use to achieve a superior international performance. This capability is well perceived in Talkdesk, Cristina Fonseca highlighted the importance of sharing the knowledge, as well as the fact that everyone inside the firm should know what the product does and how the technology works: “(...) one of the challenges we had and we had a major grow was to have people joining the company that didn’t know anything about the product or knew how things worked, so we created a knowledge management team and all the information concerning our technology and product was available for everyone in video format. We also assigned a person to be responsible for this team and updating all the documentation by talking with the engineers and customers.”

The same view was noticeable in Feedzai and Filipe Neves goes even further by saying that a constant renew of capabilities is mandatory and the firm created several teams, which were necessary with its rapid growth: “(...) we need to constantly reinvent ourselves. Every six months we have a new company and, as we grow and develop our product, we need to create new teams to tackle different problems. The sales problem is different from the retaining the customer problem (...)”. Regarding Climber Hotel, Mário Mouraz states that people and their knowledge and unique skills are a crucial resource to compete with bigger corporations, “(...) I really believe that the success of a start-up

relies on the ability to learn and to iterate faster and this is what makes us different from big companies.”

Another important characteristic found in all of the firms is the market-focused learning capability combined with a superior marketing capability, which allowed the creation of value for customers and position the products in the niche markets.

In the case of Talkdesk, the development of the product was always made taking into account the feedback of the customers: *“We were working directly with customers that were using the product and giving feedback as well as meeting the customers’ requirements.”* The same approach was used by Feedzai: *“(…) we developed unique models for each client, based on their data”*. Climber Hotel also expressed concerns about the market and customers right from the beginning of the creation of Climber: *“(…) something very important that we did very early was to understand the market and our clients by talking directly to the hoteliers and listening to their needs and feedback (...), (...) we chose to be present in other markets, such as the UK, where we know that the competitors are here and this market is more advanced in terms of revenue management. So we can grow because competition is good and can help us grow faster once we know how to position and how to take key advantages of the market.”*

These results are in accordance with the literature view that emphasizes that *born global* firms develop highly innovative, knowledge intensive products and services (Weerawardena et al., 2007). Having this proximity to the market, helps the managerial team to meet customer’s needs, therefore causing a superior international performance (Cavusgil & Knight, 2009, p. 79).

Concerning the strategies and orientations used by the firm, all the companies cultivated an innovative culture. Talkdesk emphasized the importance of building an innovative culture: *“(…) we used to do hackathons inside the company, everyone would get involved and give new ideas and we encourage people to work with teams with which they had never worked before.”* Regarding Feedzai this innovative culture and the mindset of experimenting new initiatives and taking risks even resulted in registering patents for the firm, according to Filipe Neves: *“We had people bringing their own ideas that resulted in patents that we have registered. Our Chief Science Officer (CSO) found the new idea interesting and converted it in a patent.”* In the case of Climber Hotel, Mário

Mouraz explained that there is flexibility within the firm that is essential to innovate: “(...) we give people space to try new paths inside Climber (...)”.

Another strategy used by the studied *born global* firms was the fact that all of them hired people with valuable knowledge, skills and know-how. In the case of Talkdesk, Cristina emphasized that people were the most important resource: “(...) hire a Vice-president of Sales or Marketing that has worked with other companies before and knows exactly what to do”. Filipe Neves shares the same view: “we have employees that are in the company from the beginning and now are in senior and management positions.” In the case of Climber, Mário stated that it’s important to work with the right people: “(...) we are always looking to bring different people that can bring different skills and capabilities (...)”

All the companies emphasized the ability to learn and execute fast, which is in agreement with the literature that firms should adapt to changing environments and must develop a strategic set of dynamic capabilities to achieve an accelerated internationalization (Weerawardena et al., 2007).

The strategies and capabilities adopted by every firm, were essential to their success, specifically employing a learning orientation, cultivate an innovative culture within the firm and develop new capabilities when needed. Feedzai and Talkdesk created internal teams when the firms had a major growth, showing that were able to develop new capabilities.

7. CONCLUSION

This chapter focus on the main results and conclusions of this research, contributions to the theory, limitations and suggestions for future research.

7.1. Results and Contributions to the Theory

The main purpose of this dissertation was to understand how three technological *born global* firms from different sectors internationalize with success.

The findings showed how important the international entrepreneurial orientation is to a successful and rapid internationalization.

Born global firm managers aiming for a successful internationalization of their firms must cultivate an international entrepreneurial orientation, proactively seeking new foreign markets and make use of their personal and business network relationships. They must develop inimitable and unique knowledge and create cutting-edge knowledge intensive products.

When it comes to orientations and strategies, managers should promote a learning orientation, an innovative culture within the firm, making space for trying new ideas and, most importantly, iterate fast.

Regarding products and markets, they must know the market niche to whom they develop and offer a superior quality product that meets the customer's requirements and proactively engage in international expansion with a marketing orientation.

The task of the management team is to understand how to explore and improve these capabilities and, most importantly, to recognize when new capabilities are in need to be developed to adapt to market requirements. Managers must develop and adapt strategies to the specific needs of the firm. With this dissertation it was perceived that these *born globals* achieved a successful internationalization, because they were able to implement strategies that were adapted to their characteristic.

The entrepreneurial team was identified as the main driver for the success of the firm triggered by several aspects, such as an international outlook combined with a strong entrepreneurial orientation, as well as previous international and entrepreneurial experience that made possible to develop strong network relationships.

The network relationships also benefited the growth of the *born global* firm, since it allowed the acquisition of knowledge and gave access to resources and business opportunities.

Long established companies can benefit with the actions of *born global* firms by seeking to implement their strategies and posture that help them to succeed. *Born global* firms are recognized as important organizations in the global commerce, fostering innovation and creating jobs.

7.2. Limitations and Future research

This dissertation has its own limitations that need to be discussed. The first one is related to the size of the sample of the *born global* firms studied. It would have been desirable to study a wide range of technological *born global* firms from different sectors. Another limitation was the fact that in one case was not possible to interview an element of the founding team and it would have been desirable to interview all the founders of the companies presented in this work.

This study shows that we have a lot to learn with *born global* companies, since these are able to succeed very early from their creation even though lacking several types of resources.

Nevertheless, there is still so much to explore in these firms and more research should be made to develop descriptive models and theoretical perspectives of *born global* firms.

Future research should be conducted by obtaining data from various countries in order to understand the nature of the *born global* phenomenon in different international environments and also work with a quantitative approach, using *born global* firms from different industries.

Scholars should also investigate the following research questions: How do small and resource poor *born global* firms overcome the high cost of developing knowledge intensive products with the need to achieve scale economies? How does the business model (SaaS, software products or services) of the *born global* firm affects its internationalization? Until now, there hasn't been a lot of focus on the long term survival of *born global* firms. Thus, future research should focus what happens to these firms. Which percentage become big and successful firms?

REFERENCES

- Acedo, F. J., & Jones, M. (2007). Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business*, 42(3), 236–252.
- Andersson, S., & Wictor, I. (2003). Innovative Internationalisation in New firms: Born Globals - the Swedish Case. *Journal of International Entrepreneurship*, 1, 249–276
- Bell, J. (1995). The internationalization of small computer software firms: A further challenge to "stage" theories. *European Journal of Marketing*, 29(8), 60–75.
- Cavusgil, S., & Knight, G. (2005). A Taxonomy of Born-global Firms. *MIR: Management International Review*, No. 3, *Aspects of TheInternationalization Process in Smaller Firms*, 45(January 2005).
- Cavusgil, S. T., & Knight, G. (2009). *Born Global Firms: A New International Enterprise*. New York: Business Expert Press.
- Cavusgil, S. T., & Knight, G. A. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3–16.
- Coviello, N. E., & Munro, H. J. (1997). Network relationships and the internationalization process of small software firms. *International Business Review*, 6(4), 114-135.
- Coviello, N. (2006). The network dynamics of international new venture networks. *Journal of International Business Studies*, 37(5), 713-731.
- Coviello, N., & Cox, M. (2006). The resource dynamics of international new venture

- networks. *Journal of International Entrepreneurship*, 42(2-3), 113-132.
- Dominguinhos, P. M. (2007). *Born Globals - Da formação da oportunidade à aprendizagem global*. Doctoral Thesis, Lisboa, ISEG - Lisbon School of Economics and Management.
- Dzikowski, P. (2018). A bibliometric analysis of born global firms. *Journal of Business Research*, 85, 281-294
- Edwards, R., & Holland, J. (2013). *What is Qualitative Interviewing? "What is?" Research Methods Series*. London Bloomburly Academic.
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532–550.
- Falahat, M., Migin, M. W., Chuan, C. S., & Kong, P. F. (2015). Conceptualising the Early and Rapid Internationalising Firms. *Procedia - Social and Behavioral Sciences*, 211(September), 612–618.
- Freeman, S., Edwards, R., & Schroder, B. (2006). How smaller born global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14(3), 33–63.
- Hartsfield, S., Johansen, D., & Gary, K. (2008). Entrepreneurial orientation, strategy, and marketing capabilities in the performance of born global firms. *International Business: Research, Teaching and Practise*, 2(1), 12–38.
- Hashimoto, S. (2011). *Growth Phases and Survival of Born Globals - Case: Finnish Software Firms*, Master Thesis, Helisinki, Aalto University School of Economics.
- Jick, T. D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, 24(4), 602-611.

- Johanson, J., & Vahlne, J.-E. (2003). Business relationship learning and commitment in the internationalization process. *Journal of International Entrepreneurship*, 1(1), 83–101.
- Johanson, J., & Vahlne, J.-E. (2006). Commitment and Opportunity Development in the Internationalization process: a note on the Uppsala Internationalization model. *Management International Review*, 46(2), 165–178.
- Johanson, J., & Vahlne, J. (1977). The Internationalization process of the firm - a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Knight, G. A. (2001). Entrepreneurship and strategy in the international SME. *Journal of International Management*, 7(3), 155–171.
- Knight, G. A., & Cavusgil, S. T. (1996). The born global firm: A challenge to traditional internationalization theory. *Advances in International Marketing*, 8, 11–26.
- Knight, G. A., & Liesch, P.W. (2002). Information internalization in internationalizing the firm. *Journal of Business Research*, 51(12): 1-15.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141.
- Knight, G., & Cavusgil, S. T. (2005). A taxonomy of born global firms. *Management International Review*, 45(3), 15-35
- Knight, G.A., Liesch, P.W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51(1), 93-102.
- Lumpkin, G., & Dess, G. (1996). Clarifying the entrepreneurial orientation construct and

- linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Madsen, T. K., & Servais, P. (1997). The internationalization of Born Globals: An evolutionary process? *International Business Review*, 6(6), 561–583.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*, 2nd ed. California: Sage Publications
- McDougall, P. P., & Oviatt, B. M. (2000). International entrepreneurship: The intersection of two research paths. *Academy of Management Journal*, 43(5), 902–906.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of International New Ventures. *Journal of International Business Studies*, 25(1), 45–64.
- Oviatt, B. M., & McDougall, P.P. (1995). Global start-ups: Entrepreneurs on a worldwide stage. *Academy of Management Perspectives*, 9(2), 30-43.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory and Practice*, 29(5), 537–553.
- Porter, M. (1980). *Competitive strategy*. New York: Free Press.
- Rennie, M. W. (1993). Global Competitiveness: Born Global. *The McKinsey Quarterly*, (4), 45–52.
- Rialp, A., Rialp, J., & Knight, G. A. (2005). The phenomenon of early internationalizing firms: What do we know after a decade (1993-2003) of scientific inquiry? *International Business Review*, 14(2), 147–166.
- Simões, V. C., & Dominginhos, P. M. (2001). Portuguese Born Globals: An Exploratory

- Simões, V.C., Rocha, A. da Mello, R.C. de, & Carneiro, J. (2015). Black Swans or na Emerging type of firm? The case of Borderless Firms: *The Future of Global Organizing (Progress in International Business Research, Volume 10)*, 170-200.
- Teece, D. J., Pisano, G. , & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Teece, D. (2007). Explicating Dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42(3), 294–306.
- Welch, L. S., & Luostarinen, R. (1988). Internationalization: Evolution of a Concept. *Journal of General Management*, 14(2), 34–55.
- Yin, R. K. (2003). *Case Study Research Design and Methods*, 3rd edition, California, Sage publications.
- Zahra, S. A., & George, G. (2002). International Entrepreneurship: The Current Status of the Field and Future Research Agenda. *Hitt M., Ireland R., Camp M., Sexton D. (Eds), Strategic Leadership: Creating a New Mindset. London: Blackwell*, 255-288
- Zhou, L. (2007). The effects of entrepreneurial proclivity and foreign market knowledge on early internationalization. *Journal of World Business*, 42(3), 281–293.

APPENDICES

A1. Case studies interview guidelines

The following questionnaire has **6 parts**:

1. Founders and the entrepreneurial team
2. The firm (creation and evolution)
3. The internationalization process and the Born Global firm
4. The network relationships
 - 4.1. business
 - 4.2. personal
5. Dynamic capabilities and international performance
6. Additional information

Part 1 - Profile of the Entrepreneur and entrepreneurial team *(Knight, Liesch, Mort)*

- 1.1 What is your **academic education** and of the entrepreneurial team?
- 1.2 What is your previous **professional experience** and of the entrepreneurial team (including **international experience**)? In what way the previous professional experience influenced the success of the firm? (*international entrepreneurial orientation*) (*Oviatt & McDougall, 1995, Knight & Cavusgil, 1996; Oviatt & McDougall, 1997*)
- 1.3 Did you or other members of the managerial team **created other companies before** or were involved in that process? (*entrepreneurial mindset*)
- 1.4 Before you established the firm did you created practises and procedures?
- 1.5 How do you acquire and integrate market information to create value activities? (*Weerawardena, Knight - Market focused learning capability*)
- 1.6 How do you exploit international market opportunities?

Part 2 – The Firm (Creation and Evolution of the firm) *(Gabrielsson, Bruderl, Ziegler, Preisendorfer)*

- 2.1. How did you come up with the **idea for the creation** of your firm? (*Please describe the creation of the company and who was involved. Did the founders have previous experience of the market?*)

- 2.2. When exactly was the firm founded? (*Registered and with the product ready for sales*)?
- 2.3. When the firm was established did you use your own resources (owner's equity) or did you receive financing? Can you explain of the evolution of this 2 factors? Can you also share statistics about the ROE (return on investment)?
- 2.4. What has been the **growth of the firm** regarding **sales revenue** and the **number of employees** since its creation until last year? (*can you please share statistics*)
- 2.5. How was the process of the **development of the product** and how did you find the market and customers for it?
- 2.6. Did the entrepreneurial team owned previous knowledge regarding the market approached?
- 2.7. When it became obvious that the firm had to internationalize and why? (*Global vision*)
- 2.8. Can you explain what were the most critical resources and capabilities since establishment of the firm?
- 2.9. What are the core capabilities of the firm regarding technology, marketing and management?
- 2.10. What are the most important intangible assets and financial resources? Do you have any internal routines and procedures? (*organizational learning*)

Part 3 – Internationalization process and the Born Global firm

(Johanson and Vahlne; Oviatt and McDougall)

- 3.1. What was the **main reason** to seek new markets? Can you explain regarding internal and external factors? (*Simões 1997*)
- 3.2. Which are the **characteristics of the entrepreneur and entrepreneurial team** that you consider most important for the success of the firm in the internationalization process? (*Andersson and Wictor 2001*)
- 3.3. Can you explain the **expansion to foreign countries**, when sales started in each foreign country (year, country) and which products and services?
- 3.4. What is the main market of the company? Does this market have an important characteristic for the success of the company?

- 3.5. Which internationalization methods did you use? (*Exporting, Foreign Direct Investment, Licensing...*) (*Johansson and Wiedersheim*)
- 3.6. How do you adapt your service and products to the market/country that you want to enter?
- 3.7. How do you control and manage your international activities?
- 3.8. Which countries or markets do you want to enter next?

Part 4– Network Relationships

(*Coviello and Munro, Susan Freeman, Ron Edwards and Bill Schroder (2006), Knight and Cavusgil 2009, Chetty & Campbell-Hunt, 2003; Schwens & Kabst, 2009*)

4.1. Personal Relationships

- 4.1.1. In what way your **personal international network** influenced the **establishment** of the company? Can you give examples of how your personal contacts gave you access to resources that enabled internationalization and international performance?
- 4.1.2. Were you able to identify and exploit market opportunities more easily due to your network?

4.2. Business Relationships

(*Susan Freeman, Ron Edwards, and Bill Schroder, 2006; Johanson and Vahlne 2003*)

- 4.2.1 Can you describe the nature of your relationships with suppliers, customers, competitors or other important contacts? How good are you in building networks and leveraging those? Did the nature of the relationship changed?
- 4.2.2 In what way your network provided information about the market and business opportunities?
- 4.2.3 Please share some examples regarding the creation and management of network relationships in your company.
- 4.2.4 Describe how the ability to renew network relationships has impacted your firm's establishment and growth.

Part 5. Dynamic Capabilities and international performance

(*Teece and Pisano 1994, Teece, Pisano and Shuen 1997, Teece 2007,2009, Zollo and Winter 2002, Eisenhardt and Martin, Knight and Cavusgil, Ilidio Barreto*)

- A. Dynamic capabilities are essential to sustain competitive advantage (*Teece 2009*). We are facing fast changes in technology and markets, how did the company **renewed the resources and capabilities since its creation?**
- B. How do the **managers** and the **employees** react to **emergent opportunities**?
- C. How would you characterize the firm culture in terms of experimenting new initiatives and taking risks in failing? How has the culture changed from establishment? Do you encourage the employees to have an innovative mindset and take risks?
- D. What are the organizational processes more relevant to the Innovative culture inside the firm? (*Knight & Cavusgil, 2004, Madsen & Servais, 1997; rennie 1993; e.g., Kotabe, 1990; Miller and Friesen, 1984; Steensma et al., 2000; Zahra et al., 2000*).
- E. How the firm does captures new knowledge and use it in strategic decision-making for competitive advantage? (organizational knowledge) (*Bell, Whitwell & Lukas, 2002; Day, 1994*)
- F. How do you assimilate internal and external knowledge?
- G. How is the development of new products/processes made?
- H. Can you explain the development of the most critical resources and capabilities since the establishment of the firm? Why have these been critical?
- I. What are the most important intangible assets and financial resources? Do you have any internal routines and procedures? (**organizational learning**)
- J. How do you protect and reconfigure the firm's intangible and tangible assets so that you can be competitive in the market?
- K. How does the firm sense/recognizes environmental changes (*new costumer needs, new technologies or new competition*)? (*Teece et al., 1997; Teece, 2007*).

Part 6 – Additional information

- A. In this context is there anything missing? What could I have asked you more that I didn't?
- B. Can you sum up the internationalization process of your firm? (Identify two main aspects)

A2. Case study protocol

A case study protocol contains all the instruments, the rules and procedures used to be followed during the investigation (Yin 2009).

Table 3 - Case study protocol

Task	Actions to perform	Performed activities
Case selection	Companies selection criteria	Technological born global firms that fit the definition of (Anderson and Wictor, 2003)
		Firms with rapid growth and international expansion
		Independent firms or spin-off of an existent firm
		Born global firms with unique technological products
	Contact with companies	E-mail request for cooperation, followed by contact through LinkedIn and exchange of contacts personally in entrepreneurship events
		Explanation of the research objectives and procedures
		Approval of companies for publication of their names in the study
		Scheduling of interviews with the members of the entrepreneurial team
		Request of further information regarding the companies
Information sources	Data gathering	Intensive research through online media channels regarding news about the companies
		Website search of the selected companies
		Access to internal reports of the companies
		Development of case study interview guidelines and confirmation of the material found in public documents
		Interviews with the entrepreneurs
	Timeframe	Data gathering started in March 2018
		Interviews happened between May and October 2018
	Data preparation	Identification of groups eases the comparison between cases
		Categorization enables the a qualitative interpretation of the collected data
	Data analysis (Inductive-Deductive)	Identification of common patterns among the cases
		Analysis of common patterns based on the Literature review
		Analysis of differences between the cases
	Case study discussion	Case discussion building was made according to the literature review and using the data collected of the companies studied

Source: Adapted from Yin (2003)

A3. Case descriptions

Table 4 - Selected characteristics of the interviewees

Characteristics of the interviewees	Talkdesk	Feedzai	Climber Hotel
Entrepreneur/Manager	Cristina Fonseca	Filipe Neves	Mário Mouraz
Position	Co-founder	Chief Financial Officer	Co-founder and CEO
Nationality	Portuguese	Portuguese	Portuguese
Academic Background	MSc degree in Telecommunications and Networks Engineering from Lisbon University	BSc in Management MSc in Marketing Post- graduation in Management, negotiation	BSc in Management MSc in Tourism and Hospitality Management
International experience before company creation	No	Not applicable	Yes
Specific industry experience	No	Not applicable	Yes

Source: Adapted from Simões et al. (2015)

Table 5 - Case studies description

Company characteristics	Talkdesk	Feedzai	Climber Hotel
Industry	Call centre	FinTech	Hotel
Business model	Software as a Service	Enterprise software	Revenue management software
Year of creation	2011	2011	2015
Countries of origin of entrepreneurial team	Portugal	Portugal	Portugal

Source: Adapted from Simões et al. (2015)